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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,401	12/12/2000	Eckhard Alt	IFD/046	4641

490 7590 05/16/2005

VIDAS, ARRETT & STEINKRAUS, P.A.  
6109 BLUE CIRCLE DRIVE  
SUITE 2000  
MINNETONKA, MN 55343-9185

EXAMINER

THALER, MICHAEL H

ART UNIT PAPER NUMBER

3731

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/735,401

**Applicant(s)**

ALT, ECKHARD

**Examiner**

Michael Thaler

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 61,64,65 and 68-87 is/are pending in the application.
- 4a) Of the above claim(s) 83 and 84 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 61,64,65,68-82 and 85-87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims 83 and 84 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP 821.03.

Claims 65, 68 and 76-82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 65, line 8, there is no antecedent basis for "the flowpath".

Claims 61, 64, 65, 68-82, 86 and 87 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Purdy et al. (5,562,729). Purdy et al., in figure 24, disclose stent 102 which is inherently expandable since it is resilient as indicated in col. 8, line 36, which inherently maintains the patency of a bodily vessel since it supports it, having struts 150, which in a cross-section perpendicular to the flowpath have thicker portions (shown in the strut 150 closest to the viewer of the figure as being on the left and right portions of the strut and measured in a radial direction of the stent) with a narrower portion therebetween (due to the space which receives members 110 and 128) and have a greater width (as measured in a circumferential direction of the stent) than thickness (as measured in a radial direction of the stent). Alternatively, it would have been

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obvious that the Purdy et al. stent 102 maintains the patency of a bodily vessel since it supports it. As to claim 64, struts 150 have a serpentine configuration since they undulate up and down as they extend circumferentially around the stent. As to claim 65, struts 150 are curvilinear since they curve in the circumferential direction. Further, the struts 150 are disposed about a multiplicity of through-holes (the open spaces between the struts 150). As to claims 69 and 71, Purdy et al. disclose bands (band 110 and the band which forms struts 150) connected to one another via connector (the biocompatible material which immediately surrounds band 110 to embed band 110 therein and which is described in col. 8, lines 45-47 and which is shown in figure 20 and 24). As to claim 72, stent 102 has a taper near the top of struts 150 as seen in figure 24. As to claim 74, the outer diameter has a taper shown in figures 22 and 25 due to the recess (best shown in figure 22) which reduces the outer diameter in that area. As to claim 86, the stent 102 is open at both ends before the leaves 104 are attached thereto and even after the leaves are so attached when the leaves 104 open. Alternatively, it would have been obvious that stent 102 is open at both ends for these reasons.

Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (6,582,462) in view of Johnson

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(5,449,384). Andersen et al. disclose a stent 1 having struts (wires 2, 3). Andersen et al. fail to disclose the struts having a cross-section which includes a necked region. However, Johnson teaches that the struts 622 of a stent which holds a valve prosthesis should have this shape (figure 15) in order to obtain the advantage of better securing the aortic wall material to the stent by tucking the aortic wall material into the grooves of the struts (col. 5, lines 29-39). It would have been obvious to so shape the Andersen et al. struts so that it too would have this advantage. The width of the struts (measured from top to bottom in figure 15 of Johnson) is greater than their thickness (measured from left to right in figure 15 of Johnson).

Claim 85 is rejected under 35 U.S.C. 102(b) as being anticipated by Savin et al. (4,950,227). Savin et al., in figure 5, disclose an unexpanded stent 16 (The stent is unexpanded since it is not expanded to the condition shown in figure 6. Further, the term "unexpanded" is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the product was made by a different process (M.P.E.P. 2113). In

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this case, the stent, as claimed, is certainly the same as or obvious from the stent shown in figure 5 of Savin et al.) formed from an open ended tube having a wall with a multiplicity of holes formed therethrough, the tubular wall defined by a plurality of struts, the stent tapering from the midpoint to each end of the stent at a substantially constant slope in relation to the longitudinal axis (as seen in figure 5).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's arguments filed April 15, 2005 have been fully considered but they are not persuasive. The term "unexpanded" in claim 85 merely refers to the method in which the stent was or was not manipulated in the past and therefore involves a description of the method of manufacturing of the stent rather than a structural limitation.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

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of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (571)272-4704. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571)272-4963. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

mht  
5/12/05



MICHAEL THALER  
PRIMARY EXAMINER  
ART UNIT 3731